Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently amended) ~~The present invention relates to a~~ A process for isolating imperatorin, ~~an anti-first-pass effective low molecular weight linear furanocoumarin~~ from fruits of *Aegle marmelos* Correa ~~fruits~~ said process comprising ~~the steps of~~:

a) extracting ~~fresh/dried powdered material of mature/immature~~ pulp of fruits of *Aegle marmelos* Correa ~~fruits directly~~ with halogenated solvent directly or with monohydric alcohol to obtain a miscella or an alcoholic extract respectively ~~at ambient temperature for 24 to 48 hrs. or with halogenated solvent or monohydyic, alcohol in a Soxhlett apparatus for 6 to 12 hrs, wherein a ratio of the pulp to the solvent is 1:6~~;

b) in the case where extraction has been with an alcohol concentrating the ~~extracted~~ alcoholic extract ~~solvent~~ up to 10-30% ~~by volume~~ of its original ~~extract~~ volume under vacuum;

c) in the case where step (b) has been carried out, partitioning the concentrated alcoholic extract obtained in step (b) with a halogenated solvent to transfer

imperatorin in ~~the non-polar~~ halogenated solvent and obtain a miscella;

d) drying the ~~the~~ extracted ~~portion~~ miscella obtained directly in step (a) or by partition in step (c) over anhydrous sodium sulphate and evaporating the solvent to obtain a concentrate;

e) crystallizing the concentrate[s] obtained from step (d) ~~with~~ in a solvent and filtering the crystals so formed ~~to obtain a filtrate~~;

f) concentrating the filtrate obtained in step (e) and [~~,~~ ~~(g)~~]subjecting the concentrated filtrate ~~of step (f)~~ to ~~silica gel~~ vacuum liquid chromatography on silica gel;

~~h)~~ g) eluting imperatorin ~~from the concentrated filtrate of step (g) in a pet-ether-ethyl acetate mixture;~~ in a solvent to afford a phytostero;s enriched fraction and pure imperatorin

~~i) identifying the eluted fractions enriched with phytosterols mixture;~~

~~j) identifying the fraction containing the eluted imperatorin;~~

~~k)~~ h) crystallizing the fractions containing pure imperatorin ~~to obtain pure imperatorin~~

2. (Currently amended) A process as claimed in claim 1, wherein ~~the plant parts~~ said fruit ~~of Aegle marmelos used for the extraction of imperatorin are~~ is selected from the group

consisting of mature fruit and [/] immature~~/ripe~~ fruit ~~pulp~~ and mixtures thereof .

3. (Currently amended) A process as claimed in claim 1, wherein the halogenated solvent used for direct extraction or partition is selected from the group consisting of dichlorormethane, chloroform, carbon tetrachloride and ethylene dichloride[;].

(Currently amended) A process as claimed in claim 1, wherein the monohydric alcohol solvent used for extraction is ~~selected preferably~~ either methanol or ethanol;

(Currently amended) A process as claimed in claim 1, wherein the imperatorin is crystallized from ~~the~~ a solvent, ~~wherein the solvent is~~ selected from the group consisting of pet-ether, dichloromethane, acetone and ~~methanol~~ mixtures thereof;

6. (Canceled)

7. (Currently amended) A process as claimed in claim 1, wherein the imperatorin remaining in mother liquor after crystallization is subjected to vacuum liquid chromatography over ~~a ratio of the concentrated extract of step (g)~~ to silica gel (230-400 mesh) is in the ~~range~~ ratio of 1:4 to 1:6[;].

8. (Canceled)

9. (New) A process as claimed in claim 1, wherein the pulp is fresh pulp or dried powdered pulp.

10. (New) A process as claimed in claim 1, wherein the pulp is extracted directly with a halogenated solvent or with monohydric alcohol at ambient temperature for 24 to 48 hrs with a pulp: solvent ratio of 1.3 to 1.6.

11. (New) A process as claimed in claim 1, wherein the pulp is extracted directly with a halogenated solvent or with monohydric alcohol in a Soxhlet apparatus for 6 to 12 hrs with a pulp: solvent ratio of 1.4 .

12. (New) A process as claimed in claim1, wherein the mature and immature fruits of Aegle marmelos Correa are screened by RP-HPLC in fresh and dry processes using different solvents.

13. (New) A process as claimed in claim 1, wherein furanocoumarins are selectively extracted with chlorinates solvent directly for transfer of furanocoumarins from the alcoholic phase witha chlorinated solvent selected from the group consisting of carbon tetrachloride, methylene dichloride and ethylene dichloride.

14. (New) A process as claimed in claim 1, wherein the partition of imperatorin from alcoholic to halogenated solvent reduces the bulkiness of the crude extract by 65 - 75%.

15. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from fresh mature fruits is in the range of 0.74 to 1.43% (dry weight basis) by direct process of two days cold percolation with EDC/DCM (pulp: solvent: 1:3).

16. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated

from dry mature fruits is in the range of 1.24 to 1.66% (dry weight basis) by direct process of two days cold percolation with EDC/DCM (pulp: solvent: 1:3).

17. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from fresh mature fruits is in the range of 2.19 to 2.15% (dry weight basis) by direct process of two days cold percolation with EDC/DCM (pulp: solvent: 1:6).

18. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from fresh mature fruits is 1.92/2.29% (dry weight basis) by process of EDC/DCM partition of metanolic extract.

19. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from immature fruits is in the range of 0.52% by dry process of DCM partition of methanolic extract.

20. (New) A process as claimed in claim 1, wherein the yield of imperatorin, isolated from mature fruits (3.12%), immature fruits ().89%) and ripe fruits (1.71%) by extraction in a Soxhlet apparatus for 6 - 12 hours with ethylenedichloride.